

CLASSIFIED MESSAGE

ROLLING

DATE

2108Z 19 OCT 1962

SECRET

OPERATIONAL IMMEDIATE

OPERATIONAL IMMEDIATE

25X1  
IN-52578

TO : DIRECTOR

FROM :

ACTION: OSA (1-2-3-4-5-6-7-8-9-10)

INFO : S/C (11)

TOR: 2153Z 19 OCT 1962

TO OPIM

INFO

CITE

1. DISCUSSIONS BETWEEN P AND W AND LAC AFTER ANALYSIS OF THE RECORDED DATA FROM THE THREE J-58 FLIGHTS TO DATE HAVE RESULTED IN A DECISION TO REMOVE ENGINE 202 FROM ACFT NUMBER ONE AND REPLACE IT WITH ENGINE 205.

2. THE ENGINE WAS EXAMINED WHILE RUNNING AND IT WAS APPARENT THAT CONSIDERABLE COKING OF THE SPRAY BARS WAS OCCURRING AND THIS ALONG WITH THE OTHER PROBLEMS OF THE ENGINE MADE REMOVAL ALMOST MANDATORY.

3. THE COKING HAS BEEN ATTRIBUTED BY P AND W TO THE OIL ADDITIVE IN THE FUEL AND [ ] FEELS THAT THIS PROBLEM SHOULD BE RELIEVED BY THE NEW TEFLON ADDITIVE. I QUESTIONED [ ] AS TO WHETHER THE ENGINES HAD EVER BEEN RUN ON STRAIGHT PF-1 AND THEY HAVE NOT. SO P AND W DOES NOT REALLY KNOW THE COKING CHARACTERISTICS OF STRAIGHT PF-1 IN THIS ENGINE UNDER SIMULATED OPERATIONAL CONDITIONS. WE THEREFORE HAVE NO ASSURANCE THINGS WILL BE ANY BETTER WITH THE NEW ADDITIVE.

*partially*

25X1  
Dlog eng  
only  
112 No add  
118 No hrs 1029  
XD-1 9/6/66

202, 1, 3 only

446 hrs on  
118 hrs  
L13

SECRET

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

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25X1

[REDACTED] (IN 52578)

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4. IN ADDITION THE TURBINE INLET TEMPERATURE HAS BEEN RUNNING LOW INDICATING A FUEL CONTROL PROBLEM AND NATURALLY A LOSS OF THRUST. THE FUEL COULD NOT BE TRIMMED HIGHER WITH PRESENT SYSTEM. AN ADDITIONAL PROBLEM IS THE LAG IN THE FUEL TRIMMER REQUIRING ONE TO ONE AND ONE HALF MINUTES TO REACT AFTER PILOT INITIATION. THIS IS INTOLERABLE AND A NEW TRIMMER MOTOR IS BEING INSTALLED IN LATER ENGINES WHICH WILL GIVE A REACTION TIME OF THIRTY SECONDS WHICH IS STILL NOT GOOD.

5. AS A RESULT OF THE ABOVE PROBLEMS THE THRUST IS DOWN TEN TO FIFTEEN PERCENT QUOTE P AND W OR FIFTEEN TO TWENTY PERCENT QUOTE LAC.

6. ENGINE 205 WILL BE INSTALLED INCORPORATING ALL THE LATEST FIXES AND CHANGES TO ATTEMPT TO IMPROVE THE SITUATION. IT WILL HAVE A NEW FUEL TRIMMER MOTOR; THE TURBINE EXHAUST TEMPERATURE WILL BE MONITORED RATHER THAN TURBINE INLET; THE LATEST FUEL CONTROL; THE NEW FUEL ADDITIVE WILL BE USED EXCLUSIVELY (TO REDUCE COOKING?); AIRCRAFT AND POL EQUIPMENT WILL BE DRAINED OF PRESENT OILED FUEL; AND OTHERS.

7. ENGINE 205 HAS THE NEW LOWER MOUNT SO THAT THE AIRCRAFT NACELLE MUST BE MODIFIED. THIS WILL BE DONE OVER THE WEEKEND. ] must?  
ENGINES 201, 2 AND 3 HAVE THE OLD MOUNTING SYSTEM AND WILL NO LONGER BE COMPATIBLE WITH THE NACELLE, THEREFORE, IT HAS BEEN AGREED BETWEEN KELLY AND [REDACTED] THAT THESE THREE WILL BE RETURNED TO P AND W FOR MODIFICATION OF MOUNT BEFORE THEY CAN BE USED. THIS WILL LEAVE US TWO ENGINES HERE, 204 AND 205.

25X1

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8. AS A RESULT OF THIS CHANGE AIRCRAFT NUMBER 1 WILL NOT BE  
READY FOR FLIGHT BEFORE WEDNESDAY MORNING 24 OCTOBER 1962.

END OF MESSAGE

S E C R E T